SPACE LAUNCH AND TRANSPORTATION SYSTEMS

Workshop Description

This workshop provides an integrated view of space launch and transportation systems design and operations, from customer needs, objectives and requirements, through launch and transportation system design, development, test and manufacturing to creating operations concepts and infrastructure capabilities. Lifecycle cost and the business case will be assessed. The thrust of the workshop is to identify technical risk and mitigate it in the most cost-effective manner, while maintaining the technical integrity of the vehicle(s) and infrastructure.

The workshop summarizes and amplifies on the efforts of 67 industry and government professionals with over 1000 years—10 Centuries'-- of collective experience that examined SLTS design, reducing cost, and cost-effective launch operations. The workshop is packed with wisdom that the space industry has gained over the last 20-25 years of launch activities, including expendable, unmanned as well as reusable, crewed vehicles.

The workshop is based upon a primary reference that boils down the knowledge and wisdom that industry and government have in the SLTS arena. This reference was sponsored by virtually every DoD and NASA organization that conducts space-related activities—**operations**, **use**, **design** and **development**.

The presenters of this exhaustive material are the people that wrote or edited the references. They are able to boil down the essence of the material for your future use and facilitate discussions that help you understand it and obtain maximum benefit.

In the workshop you will take a fresh look at space launch and transportation systems by emphasizing a process-oriented approach for creating cost-effective concepts to meet customer needs and objectives. The process describes how to translate SLTS objectives, requirements, and constraints into viable and cost-effective operations concepts. Discussions on vehicle design present practical, detailed approaches and tools to analyze and design manned and unmanned, reusable and expendable vehicles for Earth and other planets, including architecture and configuration, payloads, and vehicle subsystems.

Workshop presentations on launch operations describe the functions to be performed, define and evaluate the key issues, help you develop an appropriate operations concept, and assess the complexity and cost of operations. Special emphasis is placed on describing the interrelationships and tradeoffs between system design and launch operations that must occur during the early stages of planning in order to deliver effective systems.

Who Should Attend

This course is designed for a variety of space professionals who must interact with one another to produce, operate and use cost-effective space launch and transportation systems. Participants should include *managers* of all types, launch and transportation systems and subsystem *engineers*, *designers*, *analysts*, *operators* and *users* of launch systems. The material is especially useful to system engineers and project managers of new and existing systems.

Class Name:

SLTS 6

Location:

KSC

Program is Non-Residential (HQ code FT will cover tuition only. Your Center is responsible for travel, lodging and meals).

Date:

9/15 - 17/2003

How to Apply:

Visit:
http://appl.nasa.gov/managers/schoolhouse/schoolhouse_home.htm
for the Nomination Form and Contact your Center Training Point Of Contact for your Center's registration procedures.

Workshop Materials

Each participant will receive a copy of *Space Launch and Transportations Systems: Design and Operations ,* by Kirkpatrick, Larson, Ryan and Weyers*, and a* complete set of course notes.

For more information call or e-mail Julie D. Wiater at RGI, Inc:

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